HOW TO WRITE A BETTER THESIS

9.00 – 12.00pm, Friday 13th April 2007

Arts, Humanities and Social Sciences
Venue: Guild Seminar Rm 2, 1st Floor Guild Village

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STUDY Smarter
Learning, Language and Research Skills

Graduate Research School
WORKSHOP OUTLINE

9.00 – 9.10: Introduction and overview of workshop objectives

9.10 – 9.40: What is a thesis? What are the elements of a good thesis?

9.40 – 10.00: The requirement of originality

10.00 – 10.15: Producing a reader friendly text

10.15 – 10.30: The metastructure of a doctoral dissertation

10.30 – 10.45: Tea break

10.45 – 11.15: Thesis overview

11.15 – 11.30: Local level text formatting

11.30 – 11.45: Graphic aids

11.45 – 12.00: Revisiting of workshop objectives
Overview of the workshop series.

It is time to write!

The aim of these two workshops is, quite simply, to assist MA by Research and PhD candidates at UWA to write their thesis. It is, more or less, a general introduction to the scholarly writing process, although many of you may have received some induction into the conventions of academic writing whilst completing your honours or masters degree.

However, it is dangerous to assume that all candidates are beginning their graduate studies as skilled writers. It is equally dangerous to assume that candidates will acquire academic writing skills during their program. The scholarly writing process is one that requires intellectual attention beyond that given to the thesis, in other words these are skills that need to be learned.

To illustrate this further it is helpful, I feel, to think about a simple cognitive process that is involved in thesis writing. At the broadest level doctoral writing requires two important skills:

Production skills – that is, what to say, disciplinary content.

and

Rhetorical skills – that is, how to say it, the rules and conventions of turning meaning into text. It is a question of coordinating a number of independent writing skills, including:
  o Grammar
  o Syntax
  o Textual connections
  o Purpose
  o Organisation
  o Clarity
  o Reader characteristics and so forth.

Often, candidates possess a great deal of expert disciplinary knowledge (production skills), but have trouble in translating this into written text; they lack rhetorical knowledge. This workshop series will address this issue, by trying to reduce the tension between thinking and writing. After all, you will not be assessed on what you know, but on what you have written in your thesis. It is ultimately the text that will be judged. Many AHSS students spend up to 90% of their time on doing (i.e. reading) and only 10% on writing. Suggest that you divide your time so that 50% is spent on doing and 50% is spent on writing!
WHAT IS A THESIS?

A thesis is not a thesis without the expression of a central argument! According to Robert Cantwell¹, a thesis represents ‘the expression of a singular and embracive idea that permeates all aspects of the thesis production’.

In speaking of this ‘idea’, we are in fact referring, more correctly, to a clearly expressed research question. The research question is the single most important reason for the existence of your thesis; it is the product of your intense reflection and understanding of an issue within your domain. As such, it alone will guide the investigation. All the other elements that normally contribute to the making of a doctoral of masters by research thesis; the literature review, the methodology, the analysis and interpretation all exist because they reflect and address your research question. The research question is the thread that permeates all aspects of your research. It is the gauge or yardstick for determining what information should or should not be included in the thesis.

Some definitions:

A *thesis* is a proposition laid down or stated as a theme to be discussed and proved, or to be maintained against objections. (Macquarie Dictionary, 3rd Edition 1999)

For example – ‘Karl Marx’s early rejection of Judaism was a critical factor in the formulation of his doctrine of “class struggle”’.

Or

‘Cognitive function is better at sea level than at high altitude’.

A thesis is, in the first instance, a proposition that can be either proved or disproved. A thesis is, secondly, a proposition that directs a systematic study, and comes to a conclusion as to the validity of the proposition through the presentation of evidence and argumentation. Finally, thesis puts forward a clear and consistent argument, and convinces the reader of its validity through logic, analysis and evidence.

Now, when we talk about formulating a research ‘question’ we mean that you should **translate your statement into the interrogative form.** This better situates the issue in question as a matter destined for investigation.

For example: ‘Did Karl Marx’s early rejection of Judaism have a critical bearing on the formulation of his “class struggle” doctrine?’

Or

‘Is cognitive function better at sea level than at high altitude?’

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**Student exercise:** Have a go at writing your own thesis question. If you are having trouble, formulate a list of questions you would like to address in the course of your research. Can you identify a hierarchy of questions? If so, rank your questions in order of importance. When you have done this, explain your research to someone outside your discipline area and seek feedback on the clarity of your ideas.

A thesis is also:

- A complete and coherent narrative in which each chapter is an integral part.
- A model for a set of relationships. This model would be described using words, figures, tables, photographs etc.
- A platform for communicating your contribution to scholarship
- A platform for communicating your passion for the subject
- Your evidence that you should be awarded your degree.

**WHAT ARE THE ELEMENTS OF A GOOD THESIS?**

*List your priorities for the three most important features of a good thesis (we will write these on the whiteboard).*
Outline how your proposed study will fulfil the all important requirement of originality (rule 3.3.3)

For PhD: Rule 3.3.3 specifies that a PhD study must make a "substantial and original contribution to scholarship, for example through the discovery of knowledge, the formulation of theories or the innovative reinterpretation of known data and established ideas". In what way is the proposed study expected to fulfil this requirement?

Unfortunately, there is often little or no discussion between students and their supervisors as to what constitutes originality in the PhD. However, Phillips (1992)\(^2\) has listed fourteen different definitions of originality from students, supervisors and thesis examiners which might be useful.

- Carrying out empirical work that hasn’t been done before.
- Making a synthesis that hasn’t been done before.
- Using already known material but with a new interpretation.
- Trying out something in this or another country that has only previous been undertaken in other places.
- Taking a particular technique and applying it to a new area.
- Bringing new evidence to bear on an old issue.
- Being cross-disciplinary and using different methodologies
- Looking at areas that people in the discipline haven’t looked at before.
- Adding to knowledge in a way that hasn’t been done before
- Setting down a major piece of new information in writing for the first time.
- Continuing (extending) a previously original piece of work.
- Providing a single original technique, observation, or result in an otherwise unoriginal but competent piece of research.

Make sure you are explicit in identifying how your research fulfils the requirements of university rule 3.3.3

e.g. “This study takes the next logical step in integrating……”
“This study will extend…”
“Until now it has not been possible to….., however ….”
“Until now …….has not been understood, however…..”
“…..has been overlooked in previous studies of…”
“Previous work was limited by ……, we propose to…”
“It has been suggested by previous research that …….be investigated further”

Can you state concisely how your thesis will fulfil the requirement that it make a ‘substantial and original contribution to scholarship’?
PRODUCING A READER FRIENDLY TEXT

Writing is a very personal experience, and for some it generates a sense of emotional risk. This is understandable when we consider that, as a scholar, your work will come under scrutiny by supervisors, peers and eventually three independent examiners who are experts in your field of research. Feelings of self doubt are quite natural when you know that people such as these will be consistently evaluating your work over the ensuing three or more years. Added to this is the likelihood that you will, at regular intervals, reflect on the immensity of the task at hand and this might erode your confidence. There are, however, strategic ways of both finding self assurance and gaining acceptance for your work. These involve the development of rhetorical skills relating to the production of a ‘reader friendly’ text. Even though you will probably be dealing with relatively complex and abstract ideas, it is important to reduce the cognitive load your reader needs to bear. That is, you should aim at creating for your reader (and for yourself) a reduction of effort.

How to do this? There are three means through which this might be achieved:

i. **Text Format** – The ways in which textual information is presented
ii. **Graphic Aids** – Additional information to clarify content
iii. **Text Structure**³ - The arrangement of ideas in a text and the way in which they are connected

It is possible now to talk about conventional format guidelines in relation to an AHSS doctoral dissertation. Here I want to suggest that there are two levels of text formatting. The first occurs at the *global level*, where higher level textual information is presented across the entire thesis. The second occurs at the *local level*, where textual information is presented within a distinct chapter. We will firstly discuss global level text formatting. Here, our aim is to organise information⁴ in such a way that it will logically answer the ‘big question’ at hand.

THE OVERARCHING STRUCTURE OF A DOCTORAL DISSERTATION

Determining the metastructure of your doctoral dissertation will depend greatly on the discipline or department that you are from. The following is a detailed framework or structure for doctoral dissertations in the Arts, Humanities and Social Sciences. Most variations are, in fact, abbreviated forms of this (you must know precisely what is expected or considered to be conventional in your department/discipline). The formulaic nature of theses metastructure will become evident as we progress through this analysis. We will realise that the conventions and standards of ‘acceptable’ scholarly writing are defined quite narrowly. Outlining a metastructure for your work will definitely help you to handle the huge volume of material you are going to be working with.

³ To be discussed in the second workshop, 8th September
⁴ In some cases the ‘information’ has not yet been discovered. Still, it is important to earmark a space for information that you will derive at a later point in time.
The structure of your dissertation will probably be a variation on this, for example, Creative Writing candidates from the School of English, Communication and Cultural Studies structure their dissertations in this way:

- Title page
- Contents page
- Creative work
- Essay
- Bibliography

Some examples are provided from a variety of disciplines. *Also check out a variety of theses at [http://adt.caul.edu.au/](http://adt.caul.edu.au/).* This is the web site for the Australian Digital Thesis Repository program.

1. Ph.D. in History (Centre for Women’s Studies):
   - Abstract
   - Contents: simple TOC

2. PhD in History (Anthropology):
   - Abstract (one paragraph)
   - Contents: detailed TOC
   - Figures, Images, Maps: concise, with titles
3. PhD in Education
   - Abstract: more detailed, concise statement of findings at conclusion
   - Declaration: example of declaration
   - Acknowledgements: important to acknowledge research participants and supervisors
   - Contents: clear, well organised, very comprehensive

4. PhD in Economics
   - Declaration
   - Contents: comprehensive
   - Acknowledgements,
   - Abbreviations: important if you have used a lot to note them
   - Abstract: concise but clear –no methodology

5. Master of Visual Arts
   - Contents,
   - Acknowledgements
   - Illustrations,
   - Abstract: very personal approach that reflects project aims
   - Course proposal.

6. Ph.D. in English (Literature)
   - Abstract, (see version that is in paragraphs –not front page from website) clear and reflects 3-part structure
   - contents,
   - note on text: information to assist the reader

**Question:** Can you now plan the thesis structure for your own project? Once you have decided on the basic structure of your doctoral dissertation (there is generally some flexibility within disciplines) you can, at a later date, further plan the format for each section.
Introduction
General context of the research
The significance of the problem
The purpose of the study/aims of the research
Approach/theory
Statement of the organisation of the thesis

Literature review
Current theory
Synthesis and reinterpretation of previous research
Gaps in previous research
Restatement of research question and specific hypothesis

Methodology
Overview, design and details of your research

Results
Outcome of your research
Facts
Interpretation
Presentation of tables, graphs etc.

Discussion
Meaning of the results in relation to your hypothesis
Meaning of your findings in the context of previous research
Significance of the results

Future work
Unanswered questions, further research to be done in the area

Conclusion

THESIS OVERVIEW (Main text)

Your thesis is your sustained argument

Title:
Your title should reflect the thesis and capture its content in one phrase! (The same can be said of chapter titles and chapter sub-headings). Titles, therefore, should reflect the research question or proposition. The title should identify the purpose of the study, which is defined by the research question. The research question has a ripple effect in this way. Take care when composing it, as this will have a great effect on the nature of the overall dissertation.

NB. Constructing a good working title, and displaying it in a prominent place, will help you keep your writing focussed. Refer back to the title frequently as you write.
Abstract:
The abstract can be seen as a summary of the content of your thesis; why you did the work; how you did the work; and, in particular, what your main findings/ results were (your principal conclusions). The abstract should be easy to understand, contain no reference pointers, undefined terms or abstract symbols. It is important that you lay claim to originality/new results. The abstract is important for a number of reasons, for instance:
- The abstract will often be the determining factor as to whether someone will read your thesis (or not).
- It will be sent to potential examiners and they will use the abstract to determine whether they are able or willing to examine your thesis.

The General Introduction:
Although the introduction serves a number of important functions (see list below), there are two which stand out above all others. Firstly, the introduction must flag the argument that is to be presented (i.e. which is derived from your stated research question). Second, the introduction must outline the steps you will take to address the broad research question. By definition, this involves the presentation of the organisation or structure of what is to follow (the “thesis” of the thesis). The introduction might also make an argument for the value of your research, by showing that the research is important, central, interesting, problematic or relevant in some way. You can also re-establish your principal findings.

Review of literature:
An extremely important part of your thesis which demonstrates your ability to communicate existing knowledge. The main purpose of the literature review is to provide a context for and justify your research. In the literature review you should synthesise the relevant research literature to demonstrate that you are a competent researcher and that your thesis is valuable. A good literature review:
- Leads the reader to the frontiers of knowledge in the area
- Must highlight gaps in the knowledge including discussion of the limitations of conclusions that have been made
- Must highlight areas of controversy and formulate questions that need further research
- May highlight deficiencies in current methods
- Must cover “landmark” studies
- Should be concise, formal and unambiguous
After finishing the literature review, readers should understand the research question(s), procedures, and findings that characterise the field. They should also know the weaknesses of past studies and what has to be done to move the field forward. If you have organised the review skilfully you will have led the reader to the conclusion that the absolutely best next study to be done in the area is the one you are proposing.

**Chapters:**
Clearly the largest section of the thesis, the place where you will deal with the substantive issues. Resist the temptation to see the chapters as a space for ‘information-telling’ (i.e. a place where you can lay out all you know on the subject). Rather, the chapters should be used to explicate the argument. Everything you write should be relevant to addressing the research question and sustaining your argument. A note on chapter structure:

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The top part of the triangle clarifies the broad purpose of the chapter (it will reiterate what you have stated in your introduction). This section is also the structural anchor for the whole chapter. The middle part of the triangle specifies not only the form and order in which the supportive arguments are to be presented, but how these relate to the major argument. The bottom part of the triangle refers to fine grain analysis. Here is your space to provide evidence in support of your argument.

**Conclusion or General Discussion**
The conclusion is your last opportunity to get your whole message across to your readers. What was your problem?; why was it interesting?; what did you do?; what did you find?; and what do you findings mean for scholarship? The conclusion ties the findings together in relation to the overall question. The Introduction and Conclusion should “hang together” as a coherent overview of your research). Remember, a conclusion:

- Does not introduce new material
- Provides a critical assessment of the research
- May suggest further studies/questions

**LOCAL LEVEL TEXT FORMATTING**
Local level text formatting occurs at the chapter, paragraph and sentence level. The following are useful local level text formatting guidelines that you might consider employing in your thesis:

i. Information that is amenable to listing in bullet/numerical point form is more easily perceived and read if cued spatially

ii. Use a two-column format for comparison and contrast of information

iii. Group and divide text thematically the way the information logically divides and utilise appropriate sub-headings to ‘chunk’ information.

iv. Justified text (whereby horizontal spacing is inconsistent) is more difficult to read. Consistent horizontal spacing, that is unjustified text, is said to support understanding.

v. Graphic aids such as diagrams, graphs, tables, photographs and so forth should be close to their textual reference, labels and captions should be consistent.

**Typographical Cues**: these are variations in print style which is commonly employed to highlight or identify important information (and simplify the relationship between ‘chunks’ of information).

- Italics are used for a number of reasons:
  - For book names
  - To identify foreign language terms
  - To identify key terms
- To draw attention to a particular word in order to give it emphasis

- In text **boldface** type is an effective means of emphasising important key terms.

- Levels of heading may be denoted by using different type sizes (capital and lower-case), for instance
  - **PRIMARY HEADINGS** – Chapter titles
  - **Secondary Headings** - Subheadings
  - **Tertiary Headings** – Subsection headings

**Text boxes** might be useful to set off supporting information from the body of a text. Information such as examples, anecdotes and biographies can be boxed without upsetting the flow of ideas.

**GRAPHIC AIDS**

These include photographs, tables, charts, diagrams and so forth. Graphic aids may serve to augment and clarify the text through the provision of supporting material. Graphic aids are a powerful tool in this regard. However, their effectiveness relies a great deal on the way they are presented. There are some rules for the effective use of graphic aids:

- The graphic should be highly relevant to the textual information provided. Readers need to be able to discern immediately the relationship between text and graphic aid. This can be enhanced through the use of captions.

- The graphic should be placed as close as is possible to the text section it relates to. If the reader has to search for it, for instance if they have to turn the page, then they might not bother and the effect will be lost.

- The graphic should not be overloaded with information. If the graphic is dense then you can use arrows or labels to draw the reader's attention to the most critical information.

- When presenting graphics, try as much as is possible to present them so that they show some form of development